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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,863	04/09/2004	Jong-rok Park	1572.1259	8699

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STAAS & HALSEY LLP  
SUITE 700  
1201 NEW YORK AVENUE, N.W.  
WASHINGTON, DC 20005

EXAMINER

ROMAN, LUIS ENRIQUE

ART UNIT	PAPER NUMBER
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2836

MAIL DATE	DELIVERY MODE
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11/01/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

10/820,863

Applicant(s)

PARK ET AL.

Examiner

Luis Roman

Art Unit

2836

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 03 October 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1-20.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See below.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

From 11.

Applicant's arguments filed 10/03/07 have been fully considered but they are not persuasive. As a result this amendment does not place the application in condition for allowance.

In response to applicant's arguments against the rejection of claims 17 & 20 the examiner agrees on that the pages 11-12 of the final rejection is recited that Johnson et al.'853 in view of Lue et al.'023 does not disclose "wherein the cooling gas is introduced into each area synchronously with the introduction of the cooling gas into at least one other of the predetermined areas". Wherein the emphasis denotes the portion of the limitation, which is not taught. Just the synchronous way in which the coolant gas is introduced is not described. For this reason the examiner provides the combination with Arasawa et al.'810 which teaches an apparatus with this particular way of introducing the coolant gas. Johnson et al.' also discloses an ESC which uses coolant gas which is introduced in the center part of the wafer and edge part of the wafer (Fig. 4F elements 305A<center area> & 305B<edge area>).

In response to applicant's arguments against the rejection of claims 3, 5-7, 10 & 13-16 the examiner again agrees with the applicant that Johnson et al.'853 in view of Lue et al.'023 and Kano et al.'167 does not disclose "wherein the cooling gas is introduced into the center part of the wafer and edge part of the wafer synchronously". The examiner notes again that the emphasis denotes the portion of the limitation, which is not taught. Just the synchronous way in which the coolant gas is introduced is not described. But even more important is that this limitation was not in the claim before.

In response to applicant's arguments against the rejection of claims 17-20 that Johnson et al.'853 in view of Lue et al.'023 and Arasawa et al.'810 does not disclose "a) a plurality of sealing members mounted on a first surface and which directly contact and divide the wafer into a plurality of predetermined areas when the wafer is mounted on the body;... b) wherein the cooling gas is introduced into each predetermined area synchronously with the introduction of the cooling gas into at least one other of the predetermined areas". As explained above Johnson et al.' also discloses an ESC which uses coolant gas which is introduced in the center part of the wafer and edge part of the wafer, more than that as explained in the final rejection Johnson et al.'853 teaches a conduit Fig. 1B-1D with paths for two coolant gases going up (inlet) and going down (outlet) as follows.

First coolant gas: goes up thru COOLANT INLET-INNER ZONE (215) comes down thru COOLANT OUTLET-INNER ZONE (205).  
Second coolant gas: goes up thru COOLANT INLET-OUTER ZONE (210) comes down thru COOLANT OUTLET-OUTER ZONE (200).  
This does not only describe the usage of two gases (that is the purpose of having two separated paths) but also that the gas is directed to two different zones (INNER & OUTER). Moreover, It is understood that a sealing is needed between the two areas where two different gases are provided to cool the wafer otherwise having leakage from one zone to the other defeats the purpose of having two separated paths for two different gases (or the same gas as He, but at different temperatures or pressures for example). Then Lue et al.'023 teaches the use of ring-type sealers (Col. 6 lines 24-35, Col. 9 lines 11-20 & fig. 3 elements 72, 74 Fig. 4 elements 72, 74, 82). The combination is obvious when different coolant gases or same gas but different pressure or temperature depending on the cooling characteristics desired at different areas of the wafer. Because this processes with gases with different characteristics must intrinsically provide a separation of the gases by a seal since getting mixed defeats the purpose of them being different. In addition Lue et al.'023 teaches an apparatus with a ring-type sealer that when the wafer is placed on top the chuck is divided in a center area and an edge area (Fig. 3 & 4 elements 72<seal> & 82<wafer>).

ROBERT L. DEBENDINS  
PRIMARY EXAMINER